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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/034,110	12/26/2001	David R. Davis	450.232US2	1032

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EXAMINER

CHANG, YEAN HSI

ART UNIT	PAPER NUMBER
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2835

DATE MAILED: 06/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicant N .

10/034,110

Applicant(s)

DAVIS ET AL.

Examiner

Yean-Hsi Chang

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,5,6,33,34,36,38,41 and 44-51 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,5,6,33,34,36,38,41 and 44-51 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/27/06 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 3, 5-6, 33-34, 36, 38, 41 and 44-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Papa et al. (US 6,175,490 B1) in view of Morita (US 6,023,412) and Behl (US 6,185,097 B1).

Regarding claims 1 and 34, Papa teaches a cooling assembly (fig. 6) for at least one board (184, fig. 5) having mounted thereon a plurality of components (shown in fig.

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4) including a first component (104) and a further component (another 104, fig. 4), comprising: a first passage (through 560), a first fan (566A) for passing air through the passage, an isolation assembly (560) for generally enclosing heat generated from the first component mounted on the at least one board, being enclosed within the isolation assembly, the isolation assembly containing at least a part of the first passage, and the isolation assembly being removably attachable to a computer case (100, fig. 4) without opening the computer case, a further passage (through another 104) configured to provide an air flow past the further component mounted on the at least one board outside of the isolation assembly (see fig. 10), and a second fan (566A in 560 of another 104) for passing air through the further passage, said first component comprising a processor (component 104 comprising general interface card which may be a small computer system interface, SCSI controller as indicated in col. 8, lines 38-53, a SCSI controller may include a processor). Papa fails to teach that a SCSI controller may include a processor. It would have been obvious to one having ordinary skill in the art a SCSI controller may include a processor, since the Examiner takes Official notice that a SCSI controller may include a processor. If the applicant choose to properly challenge the fact that a SCSI controller may include a processor, supportive document(s) will be provided upon request. Papa also failed to teach the processor having a passive heat sink operably coupled thereto. Morita teaches a passive heat sink (44a, fig. 4) coupled to a processor (36-1) for optimizing convective cooling. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the conduit of Papa with the heat sink taught by Morita for optimizing convective cooling.

Regarding claims 3, 5-6, 33, 36, 38, 41 and 44-51, Papa further teaches the first passage including a conduit (case 560) separate from the first and second fans (see figs. 4 and 5), in communication with the isolation assembly (claims 3 and 36); wherein the plurality of components are enclosed in a case (101), and air is drawn from outside (claims 5-6 and 38); an exhaust hole (see fig. 3B) in communication with the passage and suitable for venting air through the computer case (claims 44 and 48); an air path from the first fan through the exhaust hole passes through the first passage (claims 45 and 49); and wherein the cooling assembly is configured such that substantially all of the air passing through the first fan is vented through the exhaust hole (claim 46-47 and 50-51).

Regarding claims 33 and 41, Papa discloses the claimed invention except indicating the isolating assembly being configured to shield the first component from an amount of EMI. Behl teaches an EMI shield 28 conforms in shape to a conduit 26. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the conduit of Papa with the EMI shield taught by Behl for shielding EM interferences.

Response to Arguments

4. Applicant's arguments with respect to claims 1 and 34 have been considered but are moot in view of the new ground(s) of rejection.

Correspondenc

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yean-Hsi Chang whose telephone number is (571) 272-2038. The examiner can normally be reached on 07:30 - 16:00, Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the Art Unit phone number is (571) 272-2800, ext. 35. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-8558.

Yean-Hsi Chang
Primary Examiner
Art Unit: 2835
June 7, 2006


YEAN-HSI CHANG
PRIMARY EXAMINER